



## NEW PROGRAM PROPOSAL FORM

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**Sponsoring Institution(s):** Missouri Southern State University

**Program Title:** Logistics and Transportation

**Degree/Certificate:** B.S. in Logistics and Transportation

**Options:** None

**Delivery Site(s):** MSSU Campus – Joplin, MO

**CIP Classification:** 52.0203

\*CIP code can be cross-referenced with programs offered in your region on MDHE's program inventory [highered.mo.gov/ProgramInventory/search.jsp](http://highered.mo.gov/ProgramInventory/search.jsp)

**Implementation Date:** Fall 2014

**Cooperative Partners:** None

\*If this is a collaborative program, form CL must be included with this proposal

### AUTHORIZATION:

Dr. Alan Marble/Interim President

Name/Title of Institutional Officer

A handwritten signature in dark ink, appearing to read "Alan D. Marble".

Signature

11-22-13

Date

Dr. Crystal Lemmons, Assistant VPAA

Person to Contact for More Information

417.625.9592

Telephone

## **Rationale and Student Enrollment Projections – See Form SE Attached**

### **Duplication and Collaboration**

There are two universities in Missouri that offer a Logistics programs:

- MO State University: B.S. Logistics and Supply Chain Management (sponsoring department: marketing)
- University of Missouri (St. Louis): B.S. in Business Administration, emphasis in Logistics and Operations.

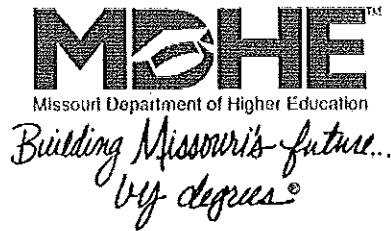
The proposed program is different than programs at the other public institutions. It has been created through collaboration between several disciplines at MSSU: Computer Information Science, General Business, Management/Marketing, and Industrial Engineering Technology. Students won't just be exposed to business perspectives but get a well-rounded knowledge base that allows them to work in service and manufacturing organizations.

We are working closely with our regional trucking companies, WalMart, and both mid-size and larger manufacturing firms in our region in pursuing this degree program. We are also reaching out to higher education institutions in Europe, Mexico and China to have a truly global influence on our program. Thus far, we have a Memorandum of Understanding with Odessa National Maritime University in the Ukraine, and we are nearly completed with another with Xi'an International University in China. While this university alliance is important in adding outreach and scale, as well as allowing students to study abroad from their home institution, our degree program is self-contained and not dependent upon them to deliver it.

### **Program Structure – See Form PS Attached**

### **Financial Projections – See Form FP Attached**

### **Program Characteristics and Performance Goals – See Form PG Attached**



## STUDENT ENROLLMENT PROJECTIONS

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Year	1	2	3	4	5
Full Time	10	15	20	25	30
Part Time	10	10	10	10	10
Total	20	25	30	35	40

Please provide a rationale regarding how student enrollment projections were calculated:

Historically, we had an orphan minor in transportation and logistics. There was quite a bit of interest. The classes remain on our books and we continue to teach them to good levels of interest. At present, the Plaster School of Business graduates about 25% of all baccalaureate degrees on campus. Our market here in the area shows significant demand for Logistics degrees. Extrapolating from the enrollment in our courses supporting this program, we anticipate that the projected numbers are more than justified. Enrollment will not be capped.

Provide a **rationale** for proposing this program, including **evidence of market demand and societal need supported by research**:

### Regional Demand:

Based on Department of Commerce data, the Logistics sector of the Joplin area is the third largest economic sector in the Joplin, MSA. The largest sector is in Manufacturing. Both of these are intensive users of logistics services and well trained labor. We anticipate there will be strong demand throughout SW Missouri and into the larger region up and down the I-44 Corridor. A purpose and need statement (2008) submitted to the Missouri Department of Transportation commented on the importance of transportation in this region: "Freight trucking is a vital element of Missouri's economy and a key component of the I-44 traffic stream... Key facts about I-44 truck traffic include: Freight moved by trucks in Missouri is expected to reach 542 million tons per year, with a value of 730 billion dollars, by 2020. In Missouri,

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approximately 70 percent of all freight, by tons and value, is moved by trucks.

Currently, the I-44 traffic stream is comprised of approximately 270 percent trucks. Along some sections of I-44, truck volumes in 2035 are expected to approach 23,000 trucks per day; (a 162 percent increase).” Source:

<http://www.modot.org/i44planningforprogress/documents/I-44-P-NFINAL.pdf>• A search on indeed.com for Logistics and Supply Chain Management positions, conducted on Oct 6, 2013, resulted in 26 open positions for Joplin and a region of 50 miles within Joplin. National Demand: Logistics is increasingly important in our world driven by global commerce. According to the Bureau of Labor Statistics, employment of logisticians is expected to grow 26 percent from 2010 to 2020, faster than the average for all occupations, with 27,800 jobs added. Employment growth will be driven by the important role logistics play in an increasingly global economy. Societal Need: Logistics is the flow of inputs from raw and recycled materials into a transformation process, thus creating goods and services, which then flow to ultimate consumers. General economic analysis suggests that with globalization, and increasing competition at all fronts, the need for the efficient movement of resources, intermediate goods and final goods will be increasingly important. This bears out in the national economic data which suggest that employment in this category is expected to rise dramatically over the next ten years.



# PROGRAM STRUCTURE

A. Total credits required for graduation: 124

B. Residency requirements, if any: The following minimum requirements must be in residence at Missouri Southern: (1) 30 of the last 36 hours counted toward the degree; (2) one-half of the credit both required for the major and in the major department (Courses required for the major but not offered in the major department are not included); (3) one-half of the upper division credit both required for the major and the major department.

C. General education: Total credits: 46-47

Courses (specific courses OR distribution area and credits):

Course Number	Credits	Distribution Area
	6	Written Communication
	3	Oral Communication
	3	Mathematics
	8-9	Life and Physical Sciences
	12	Social and Behavioral Sciences
	6	Humanities and Fine Arts
	2	Health and Wellness
	3	University Experience
	3	International Requirement
Total	46-47	

D. Major requirements: Total credits: 36

Course Number	Credits	Course Title
GB 321	3	Business Statistics
MRKT 300	3	Principles of Marketing
LOGT 340	3	Principles of Transportation
LOGT 345	3	Business Logistics
LOGT 360	3	Supply Chain Management
IET 205	3	Computer Applications and Cost Analysis
IET 300	3	Engineering Economics
IET 310	3	Production Planning and Control
IET 355	3	Work Measurement
IET 380	3	Principles of Lean
CIS 202	3	Information Systems I
CIS 375	3	Information Technology Project Management
Total	36	

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E. Free elective credits:

42

(Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience:

None

G. Any unique features such as interdepartmental cooperation:

The proposed program has been created through collaboration between several disciplines at MSSU: Computer Information Science, Management/Marketing, General Business, and Industrial Engineering Technology. Students won't just be exposed to business perspectives but get a well-rounded knowledge base that allows them to work in service and manufacturing organizations.



## PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

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Institution Name      Missouri Southern State University  
Program Name          Logistics and Transportation  
Date      11/20/2013

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

### 1. Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.  
No special preparation is required.
- Characteristics of a specific population to be served, if applicable.  
Not applicable.

### 2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.  
The faculty credential and experience requirements for this degree program will follow MSSU's standard policies for faculty qualifications. Faculty must possess at least a Master's degree in the field or related area of the discipline.
- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.  
It is estimated that 75 percent of credit hours will be assigned to full-time faculty.
- Expectations for professional activities, special student contact, teaching/learning innovation.  
The courses are designed to facilitate student interaction with other students and faculty. Many simulations and case studies are part of the curriculum. In addition, students are expected to draw from their respective work place for their class projects.

### 3. Enrollment Projections

- Student FTE majoring in program by the end of five years.  
Thirty five FTE students are estimated to be in the program at the end of five years.

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- Percent of full time and part time enrollment by the end of five years.  
75 percents of the students will be full-time; 25 percent will be part-time at the end of five years.

#### 4. Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.  
Four graduates are expected at three years after implementation and ten graduates are expected at five years after implementation.

- Special skills specific to the program.

##### Program Objectives:

The Logistics and Transportation program will produce graduates who: 1. Demonstrate knowledge of the discipline of logistics and its role in a societal and global context; 2. Demonstrate an appropriate mastery of the knowledge, skills, techniques, and modern tools appropriate to logistics; 3. Identify, analyze, and solve technical problems appropriate to the discipline; 4. Communicate effectively with varied audiences.

Program Outcomes: 1. Ability to apply knowledge of logistics; 2. Ability to apply knowledge of supply chain management; 3. Ability to apply knowledge of transportation and factors that influence transportation decisions; 4. Ability to apply knowledge of project management and the economic viability of projects; 5. Ability to apply knowledge of production and inventory management philosophies and techniques; 6. Ability to apply knowledge of standards, methods design, and work measurement; 7. Ability to apply knowledge of lean principles; 8. Ability to identify, analyze, and solve technical problems using appropriate methodologies and tools; 9. Ability to prepare concise written and oral reports for a variety of audiences; 10. Ability to use software applications where appropriate; 11. Knowledge of contemporary, professional, societal, and global issues.

- Proportion of students who will achieve licensing, certification, or registration.  
None
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.  
Local assessment instruments will be used in various courses. The assessments are linked to learning outcomes as demonstrated through the assessment instrument (e.g. tests or project work). The goal is for 75 percent of students to gain a score of 70 percent or greater on course grades, course grade components, assignments, or project components.



- Placement rates in related fields, in other fields, unemployed.  
Ten percent of students are expected to be employed in other fields. Eighty percent of students are expected to be employed in the field.
- Transfer rates, continuous study.  
Ten percent of the students are expected to continue their studies.

## 5. Program Accreditation

- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. **If there are no plans to seek specialized accreditation, please provide a rationale.**  
Logistics and Transportation is truly an interdisciplinary field of study. Our program draws on courses from our accredited business and industrial engineering technology programs. At least in the initial stages of development, we do not believe that specialized accreditation in Logistics and Transportation is necessary, or even widely expected at present. Programs in Logistics and Transportation have wide variation in curriculum and how they are housed in academic units. We believe our collaboration between business, engineering technology, and computer information science programs makes for a powerful combination that will allow the student to be competitive globally.

## 6. Alumni and Employer Survey

- Expected satisfaction rates for alumni, *including timing and method of surveys*.  
Surveys will be conducted one year after graduation via the Internet. Expected satisfaction rates are average scores of 3.5 on a five-point scale.
- Expected satisfaction rates for employers, including timing and method of surveys.  
Surveys will be conducted 12 to 14 months after graduation via the Internet. Expected satisfaction rates are average scores of 3.5 on a five-point scale.

## 7. Institutional Characteristics

- Characteristics demonstrating why your institution is particularly well-equipped to support the program.  
MSSU is particularly well-equipped to support this program given that we have expertise in supply chain management at both the global and domestic levels, and we teach all of the elements of lean process improvement in our industrial engineering programs, which focus nearly entirely on improving the rate of flow in the movement of product through a system at reduced cost. Lean Logistics studies are, in fact, dominant at this time, and are likely to be so for some time to come. Further, the integration of materials tracking, flow charting, and project management are critical pieces to round out the student in the development of students' knowledge, skills, and abilities as a logistics professional.



*Never Settle for Less.*

To: Missouri Department of Higher Education

I am very pleased to offer this letter of support on behalf of the Robert W. Plaster School of Business at Missouri Southern State University as they plan to offer a new bachelor's degree in Logistics, beginning Fall of 2014.

Having a trained workforce in Logistics available to us in our region is critical to our business & future success. We believe that the increasingly global nature of business and the increasingly competitive environment makes it critical to manage our margins in every possible way. To do so, we must have qualified people with the insights needed to reduce needed shipping costs and best manage our portfolio of options. Efficiency in our operations is increasingly a strategic comparative advantage that we must pursue and sustain. Graduates coming from this new degree program in Logistics will be important to our region and add a vital skill set to our regional human resource pool.

Sincerely,

Sincerely,

A handwritten signature in black ink that reads "Saul Gonzalez".

Saul Gonzalez  
President  
Con-way Truckload  
Never Settle for Less.

4701 E. 32nd Street  
Joplin, MO 64804  
(800) 641-4747 Phone ext. 5385  
(417) 659-5045 Fax

[gonzalez.saul@conwaytruckload.com](mailto:gonzalez.saul@conwaytruckload.com)





Tri-State Motor Transit Co.  
Post Office Box 113  
Joplin, Missouri 64802  
800-234-8768

November 21, 2013

To: Missouri Department of Higher Education

I am very pleased to offer this letter of support on behalf of the Robert W. Plaster School of Business at Missouri Southern State University as they plan to offer a new bachelor's degree in Logistics, beginning Fall of 2014.

Having a trained workforce in Logistics available to us in our region is critical to our success. The four-state area surrounding Missouri Southern State University is home to over one hundred forty (140) transportation and logistics firms, many servicing the complete United States markets. We believe that the increasingly global nature of business and the increasingly competitive environment makes it critical to manage our margins in every possible way. To do so, we must have competent people with the insights to reduce needed shipping costs and best manage our portfolio of options for our customer base. Efficiency in our operations is increasingly a strategic comparative advantage that we must pursue and sustain. In the evolving electronic business world of transportation, skilled people are still the core to any successful business. Graduates coming from this new degree program in Logistics will be important to our region and add a critical skill set to our human resource pool.

Sincerely,

David R. Bennett  
Executive Vice President  
Tri-State Motor Transit Co.  
8141 East 7<sup>th</sup> Street  
Joplin, MO 64801  
(800) 234-8768 ext. 2121  
[david.bennett@tsmtco.com](mailto:david.bennett@tsmtco.com)

cc: John P. Groesbeck, PHD  
Dean, Robert W. Plaster School of Business  
Missouri Southern State University  
Joplin, MO

Mrs. Leslie Martin  
Director, Customer Service  
Tri-State Motor Transit Co.  
Joplin, MO